



Launch Mission Execution Forecast

Mission: Falcon 9 Transporter-1

Issued: 18 Jan 2021 / 0800L (1300Z)

Valid: 21 Jan 2021 / 0924-1024L (1424-1524Z)



Forecast Discussion: High pressure is building into Central Florida behind a cold front that is pushing off to the south. Cool mornings and warm afternoons with partly cloudy skies will be a daily occurrence across the Space Coast for the first half of the week. On Thursday, a frontal system will spread across the Eastern Seaboard, draping a front just to our east. This will bring in a few mid-level clouds as the high center is nudged south of the Spaceport. The primary weather concern is the Thick Cloud Layer Rule with these mid-level clouds associated with the frontal boundary.

On Friday, the high pressure remains situated to our south while a strong frontal system will approach the Florida Panhandle. This will further destabilize conditions, enhancing the mid-level cloudiness across the area. The primary weather concern for Friday remains the Thick Cloud Layer Rule.

Launch Day	Probability of Violating Weather Constraints							
	20%	Primary Concerns: Thick Cloud Layer Rule						
	Weather Conditions						Additional Risk Criteria	
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Moderate
	Temp/Humidity:	64°F / 72%	Altocumulus	Scattered	10,000	12,000	Booster Recovery Weather:	Low
	Liftoff Winds (200'):	300° 5-10 mph					Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	30%	Primary Concerns: Thick Cloud Layer Rule						
	Weather Conditions						Additional Risk Criteria	
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	66°F / 82%	Altocumulus	Scattered	10,000	13,000	Booster Recovery Weather:	Low
	Liftoff Winds (200'):	230° 12-17 mph	Cirrostratus	Scattered	25,000	28,000	Solar Activity:	Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.								
Next Forecast Will Be Issued		19 Jan 2021						